UI Bulletin 116b

Subject:	Snow Plow Lamp Activation
Models Years Affected:	2014 and Beyond
Models Affected:	Chevrolet Silverado GMC Sierra
Origination Date:	June 9, 2014
Revision Date:	December 6, 2016

ADVISORY:

Condition/Concern:

Upfitters installing Snow Plows have requested additional information regarding the vehicle headlamp interface and the system function/requirements when the headlamps are switched from truck headlamps to plow mounted headlamps. Some customers have reported that one or both headlamps go off when attaching the plow and switching over to the plow lamps.

Repair/Recommendation:

For best results, switch lights to Park or OFF before connecting the electrical plugs when mounting the plow. This avoids current surges that could cause headlamp low beam shut down. Once the plow lights are connected the headlamps may be turned back ON.

Additional Information:

The plots below show the expected 'actual' headlamp current vs the 'over current' limits at headlamp activation. The BCM expects to see a a single 'high current inrush and decay event' [current spike] as is normal with both incandescent and HID headlamps. If the headlamp circuit is switched [disconnected and then reconnected] after initial turn ON the subsequent [later] current spike may cause the diagnostic to turn the lamp off. Each time the headlamp is turned ON the diagnostic runs and a single current spike occurs. However, once normal running current is reached if a [later] second current spike occurs the BCM may turn off the lamp to protect the driver chip. Switching or interrupting the headlamp circuit causes current spikes. High current is not expected after lamp warm up and 'looks like' a short circuit.

Later version trucks have limited 'retry' provisions in the headlamp lamp diagnostic which renders the system somewhat tolerant to a 'switch over' event. [It will try a few times before shutting down.] Turning headlamps OFF at plow connection is best.

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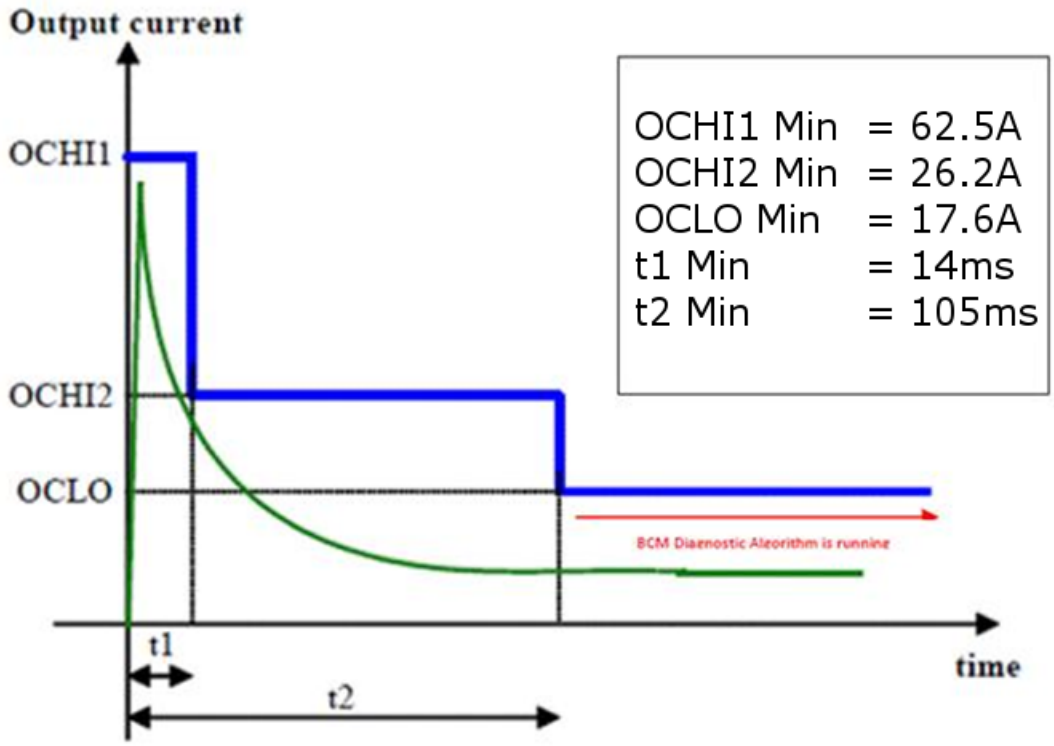
Figure 1: Over-current Plot 2014 - 2016



Transient Over-current Profile

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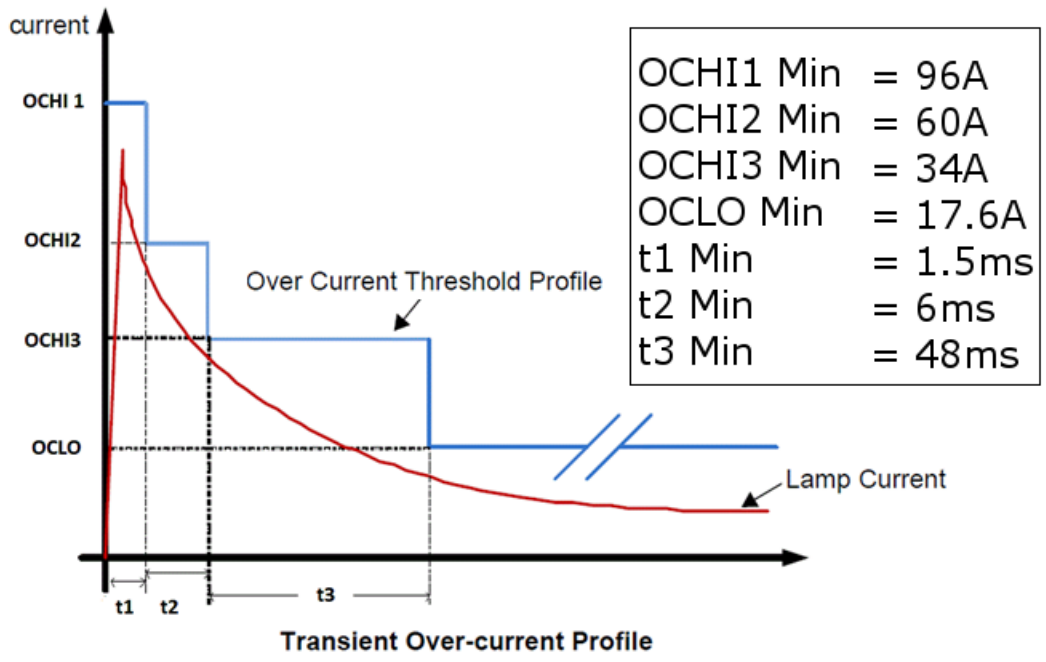
Figure 2: Over-current Plot 2017 and later [incandescent and HID]



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